

IN THE CLAIMS

Please amend claims 1-16 as follows:

[[1]] 1. (Currently Amended) A method of making 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole, which method comprises the steps in sequence of: (i) reacting bromine with a solution of 4-acetamido-cyclohexanone in water to produce 2-bromo-4-acetamido-cyclobexanone; (ii) adding thiourea to produce 6-acetylamino-2-amino-4,5,6,7-tetrahydro-benzthiazole; (iii) adding an aqueous solution of hydrobromic acid to produce 2,6-diamino-4,5,6,7-tetrahydro-benzthiazole; and (iv) isolating 2,6-diamino-4,5,6,7-tetrahydro-benzthiazole.

[[2]] 2. (Currently Amended) A method according to claim 1, wherein step (iii) is carried out without isolating the 6-acetylamino-2-amino-4,5,6,7-tetrahydro-benzthiazole produced in step (ii).

[[3]] 3. (Currently Amended) A method according to claim 1 ~~or 2~~, wherein any three successive steps of steps (i) to (iv) are carried out in a single reaction vessel.

[[4]] 4. (Currently Amended) A method according to claim 1, ~~2 or 3~~, wherein steps (i) to (iv) are carried out in a single reaction vessel.

[[5]] 5. (Currently Amended) A method according to claim 1, ~~2, 3 or 4~~, further comprising, prior to step (i), the step of ~~oxidising~~ oxidizing 4-acetamido-cyclohexanol to produce 4-acetamido-cyclohexanone.

[[6]] 6. (Currently Amended) A method according to claim 5, wherein the step of ~~oxidising~~ oxidizing 4-acetamido-cyclohexanol to produce 4-acetamido-cyclohexanone and at least three successive steps of steps (i) to (iv) are carried out in a single reaction vessel.

[[7]] 7. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein in step (i) the solution of 4-acetamido-cyclohexanone in water and bromine are combined at a temperature of from 15°C to 40°C.

[[8]] 8. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein, after the bromine and the 4-acetamido-cyclohexanone solution have been combined, the mixture is heated to a temperature of from 40°C to 50°C, and maintained at or near this temperature until the bromination is complete.

[[9]] 9. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein, in step (ii), the temperature is increased to 70°C to 90°C.

[[10]] 10. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein step (iii) is carried out under refluxing conditions.

[[11]] 11. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, wherein, after step (iii) but before step (iv), the reaction mixture is cooled to 5°C to 20°C, then neutralized ~~neutralised~~.

[[12]] 12. (Currently Amended) A method according to ~~any preceding claim~~ claim 1, further comprising the step of resolving the 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole isolated in step (iv) into its R(+) and S(-) enantiomers and recovering the R(+) and/or S(-) enantiomer.

[[13]] 13. (Currently Amended) A method of ~~synthesising~~ synthesizing pramipexole, comprising the steps of: forming 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole by a method according to ~~any preceding claim~~ claim 1, and converting it to pramipexole.

[[14]] 14. (Currently Amended) A method according to claim 13, wherein 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole is converted to pramipexole by reaction with a propionyl halide.

[[15]] 15. (Currently Amended) A method according to claim 13 ~~or 14~~, wherein the 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole comprises the R(+) enantiomer.

[[16]] 16. (Currently Amended) A method according to claim 13 ~~or 14~~, wherein the 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole comprises the S(-) enantiomer.

[[17]] 17. (Currently Amended) A method according to claim 13 ~~or 14~~, wherein the 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole comprises a racemic mixture.

[[18]] 18. (Currently Amended) A method according to claim 14, further comprising the step of resolving the pramipexole into its R(+) and S(-) enantiomers and recovering the R(+) and/or S(-) enantiomer.

[[19]] 19. (Currently Amended) A method of synthesizing 2,6-diamino-4,5,6,7-tetrahydro-benzthiazole substantially as herein described with reference to the Examples.